

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method in a computer system for loading a version of a hierarchical document, comprising:

creating a snapshot of the hierarchical document;
storing a modification made to the hierarchical document;
receiving a request for a version of the hierarchical document;
locating a snapshot near the requested version of the hierarchical document;
loading the located snapshot; and
using the stored modification to re-create the requested version, wherein using the stored modification includes applying the stored modification to the located snapshot, thereby re-creating the requested version of the hierarchical document.

2. (Original) The method of claim 1 wherein a first snapshot is closer to the requested version than a second snapshot when the first snapshot was created closer in time to a requested time than the time at which the second snapshot was created.

3. (Original) The method of claim 1 wherein a first snapshot is closer to the requested version than a second snapshot when fewer modifications are stored between the first snapshot and the requested version than between the second snapshot and the requested version.

4. (Original) The method of claim 1 wherein the request is received at a server computing device from a client computing device.

5. (Original) The method of claim 1 wherein the request is generated by a client computing device in response to a message from a server computing device to undo changes the client computing device applied to a local copy of the hierarchical document.

6. (Original) The method of claim 1 wherein the method is performed by a client computing device.

7. (Original) The method of claim 1 wherein the method is performed by a server computing device.

8. (Currently Amended) A computer-readable medium for creating a version of a hierarchical document, the hierarchical document having a node, comprising:

- a snapshot of the hierarchical document, wherein the snapshot includes the node and any attributes relating to the node, and wherein the snapshot is created based on mutations that are made to the hierarchical document; and
- an indication of a mutation applied to the node, wherein the indication includes a time the mutation was applied.

9. (Original) The computer-readable medium of claim 8 wherein the indication of a mutation includes a user requesting the mutation.

10. (Currently Amended) A system for loading a version of a hierarchical document, the hierarchical document having a node, comprising:

- a component that stores a snapshot of the hierarchical document, the snapshot including the node, the snapshot being created based on a mutation that is made to the hierarchical document;
- a component that stores a mutation applied to the node; and
- a component that removes the stored modification from the node of the stored snapshot to create a version of the hierarchical document; and
- a component that loads a the version of the hierarchical document.

11. (Currently Amended) The system of claim 10 wherein ~~the loading includes loading a snapshot near an indicated version and applying stored mutations~~ the

component that removes the stored modification from the node further applies another stored modification to a node of another stored snapshot of the hierarchical document to create another version of the hierarchical document.

12. (Currently Amended) The system of claim 11 wherein the ~~loaded~~-stored snapshot is nearer the indicated version than another snapshot.

13. (Currently Amended) A system for loading a version of a hierarchical document that includes multiple nodes, comprising:

- a component that creates a snapshot of the hierarchical document;
- a component that stores a modification made to the hierarchical document;
- a component that receives a request for a version of the hierarchical document;
- a component that locates a snapshot near the requested version of the hierarchical document;
- a component that loads the located snapshot; and
- a component that uses the stored modification to re-create the requested version, wherein the component removes the stored modification from the located snapshot, thereby re-creating the requested version.

14. (Original) The system of claim 13 wherein a first snapshot is closer to the requested version than a second snapshot when the first snapshot was created closer in time to a requested time than the time at which the second snapshot was created.

15. (Original) The system of claim 13 wherein a first snapshot is closer to the requested version than a second snapshot when fewer modifications are stored between the first snapshot and the requested version than between the second snapshot and the requested version.

16. (Original) The system of claim 13 wherein the request is received at a server computing device from a client computing device.

17. (Original) The system of claim 13 wherein the request is generated by a client computing device in response to a message from a server computing device to undo changes the client computing device applied to a local copy of the hierarchical document.

18. (Original) The system of claim 13 wherein the method is performed by a client computing device.

19. (Original) The system of claim 13 wherein the method is performed by a server computing device.